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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/806,834 03/22/2004 Dong-Yeon Kim 59300-CIP (71970) 4234 02/03/2006 EXAMINER 21874 7590 **EDWARDS & ANGELL, LLP** PRYOR, ALTON NATHANIEL P.O. BOX 55874 ART UNIT PAPER NUMBER BOSTON, MA 02205 1616

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/806,834	KIM ET AL.
	Examiner	Art Unit
	Alton N. Pryor	1616
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
 1) ☐ Responsive to communication(s) filed on <u>07 Not</u> 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E 	action is non-final. ace except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-4 and 6-8 is/are pending in the application Papers Claim(s) 1-4 and 6-8 is/are allowed. Claim(s) 1-4 and 6-8 is/are rejected. Application Papers	vn from consideration.	
9) The specification is objected to by the Examiner		
10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the objection to the drawing sheet(s) including the correction of the objected to by the Examination is objected to be a subject to be a subject to by the Examination is objected to be a subject to be a subject t	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s)	A) 🗖 Intoniano Summero	(DTO 412)
Notice of References Cited (P10-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/3/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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DETAILED ACTION

I. Rejection of claims 1,6-8 under 35 USC 102(b) as being anticipated by Netzer et al will not be maintained. Applicant is correct in that Netzer discloses the instant compound wherein the piperazine has a hydroxyl attached rather than an alkyl as disclosed by the instant claims.

Applicant's arguments, see paper, filed 11/7/05, with respect to the rejection(s) of claim(s) 1,6-8 under under 35 USC 102(b) as being anticipated by Netzer et al have been fully considered and are persuasive. Therefore, the rejection and objection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of rejections below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4,6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then

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narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation 5 to 7 saturated monocyclic radical which has 1 to 3 hetero atoms selected from nitrogen, oxygen, and sulfur, and the claim also recites a piperazinyl or homopiperazinyl each of which is substituted by lower alkyl which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Zimmermann et al (WO 99/03854; 1/18/099). Zimmermann teaches the compound (I), 4-(4-methylpiperain-1-ylmethyl)-N- [4-methyl-3-(4-pyridin-3-yl)pyrimidin-2-ylaminophenyl]benzamide. See abstract. Zimmermann teaches a pharmaceutical composition comprising the compound formula I. Zimmermann teaches that the composition can be administered orally to cancer patients. Zimmermann teaches the instant compound wherein R1 = 3-pyridyl; R7 = radical of formula (2); n = 0;

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R2,R3,R5,R6 = H; and R9 = 4-piperazinyl. Instant dependent claim 8 discloses a composition to be used as an injection. Note in a claim to a composition a statement with respect to the composition's intended use has no patentable significance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Zimmermann as applied claims 1,2,6-8 above. Zimmermann teaches all that is recited
in claim 3 except for the compound having R4 = H. It would have been obvious to one
having ordinary skill in the art to have made the instant compound wherein R4 = H. One
would have been motivated to do this since H and methyl have been shown to be
chemically equivalent, and therefore, yield similar activity.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Alton Pryor

Primary Examiner

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